

OUTPUT:

1.

```
Marks= [30, 50, 40, 60]
Sum= 180
Product= 3600000
Highest mark= 60
Lowest mark= 30
```

2.

```
A= ['abc', 'xyz', 'aba', '1221']
aba at index 2
1221 at index 3
```

3.

```
*

* *

* * *

* * * *

* * * * *

    A

  A B

A B C

A B C D

A B C D E
```

4.

```
List: ([('Black', 'Red', 'Maroon', 'Yellow'), ('000000', 'FF0000', '800000', 'FFFF00')],  
[{'Black': '000000', 'Red': 'FF0000', 'Maroon': '800000', 'Yellow': 'FFFF00'}, {'Black': '000000', 'Red': 'FF0000', 'Maroon': '800000', 'Yellow': 'FFFF00'}])
```

5.

```
1-50  
  
2 : 4  
4 : 16  
6 : 36  
8 : 64  
10 : 100  
12 : 144  
14 : 196  
16 : 256  
18 : 324  
20 : 400  
22 : 484  
24 : 576  
26 : 676  
28 : 784  
30 : 900  
32 : 1024  
34 : 1156  
36 : 1296  
38 : 1444  
40 : 1600  
42 : 1764  
44 : 1936  
46 : 2116  
48 : 2304
```

2	:	4
4	:	16
6	:	36
8	:	64
10	:	100
12	:	144
14	:	196
16	:	256
18	:	324
20	:	400
22	:	484
24	:	576
26	:	676
28	:	784
30	:	900
32	:	1024
34	:	1156
36	:	1296
38	:	1444
40	:	1600
42	:	1764
44	:	1936
46	:	2116
48	:	2304
50	:	2500
52	:	2704
54	:	2916
56	:	3136
58	:	3364
60	:	3600
62	:	3844
64	:	4096
66	:	4356
68	:	4624
70	:	4900
72	:	5184
74	:	5476
76	:	5776
78	:	6084
80	:	6400
82	:	6724
84	:	7056
86	:	7396
88	:	7744
90	:	8100
92	:	8464
94	:	8836
96	:	9216
98	:	9604

6.

Enter a four digit number:

4502

Sum of digits: 11

Reverse of the number: 2054

7.

Area of triangle with sides 20, 30, 40 = 290.4737509655563

Enter sides of triangle:

Side a: 45

Side b: 50

Side c: 40

Sides of triangle 1 = 45.0 50.0 40.0

Enter sides of triangle:

Side a: 30

Side b: 29

Side c: 36

Sides of triangle 2 = 30.0 29.0 36.0

Area of triangle 1 = 854.9259836383499

Area of triangle 2 = 420.53351531120563

Total area of the 2 triangles = 1275.4594989495554

Contribution of triangle 1 = 67.02886170375861 %

Contribution of triangle 2 = 32.971138296241406 %

8.

Name: John Doe

Age: 30

Blood Group: A+

Name: Jane Smith

Age: 25

Blood Group: B-

Name: Emily Davis

Age: 40

Blood Group: O+

Name: William Johnson

Age: 35

Blood Group: AB-

Name: Michael Brown

Age: 28

Blood Group: A-

Name: Emma Wilson

Age: 22

Blood Group: B+

```
Name: Oliver Martinez
Age: 33
Blood Group: O-
-----
Name: Sophie Anderson
Age: 37
Blood Group: AB+
-----
Name: James Thomas
Age: 45
Blood Group: A+
-----
Name: Isabelle Lee
Age: 38
Blood Group: B-
-----
```

9.

```
The tuple= ('python', 'learn', 'includehelp')
Output list: ['n', 'n', 'p']
```

10.

```
Enter the month name January
The number of days in January is 31
```

```
===== RESTART: C:\Users\athir\PYTHON_LAB
Enter the month name February
Enter year2024
The number of days in February is 29
```

```
===== RESTART: C:\Users\athir\PYTHON_LAB
Enter the month name September
The number of days in September is 30
```